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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,285	03/29/2004	Theodore R. Arneson	CS23014RL	2278
20280	7590	07/31/2007		
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			EXAMINER CAI, WAYNE HUU	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 07/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/812,285	Applicant(s) ARNESON ET AL.	
	Examiner Wayne Cai	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-19 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 14-19 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata (US 2001/0023197) in view of Noro (EP 1222971, Note: Applicant's cited reference), and further in view of Yokoyama (JP 03131257).

Regarding claim 14, Shibata discloses a handheld audio device comprising (i.e., a radio communication device as seen in fig. 1):

a housing (fig. 1, casing 10), said housing holding:

a controller (fig. 2, control unit 140);

at least one memory storing a control program for operating the handheld audio device (fig. 2, memory 80), said at least one memory (memory 80) coupled to the controller (control unit 140);

an audio system (receiver 50 & microphone 40) coupled to the controller (control unit 140);

an ambulation system (vibrator 90 & vibration drive circuit 131) comprising:
a first drive circuit (vibration drive circuit 131) coupled to the electromechanical ambulation mechanism (vibrator 90), and coupled to the controller (control unit 140).

Shibata does not specifically disclose:
wherein the controller is programmed to drive the ambulation system in response to audio processed by the audio system; and
a first electromechanical ambulation mechanism having a first foot extending through a first opening in the housing for making contact with an external surface on which the handheld audio device is place.

In a similar endeavor, Noro discloses a device for driving vibration source. Noro further discloses wherein the controller is programmed to drive the ambulation system in response to audio processed by the audio system (paragraphs 0028 & 0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Shibata with Noro.

The motivation/suggestion for doing so would have been to entertain user when notifying the incoming call with the vibration and the sound corresponding to the melody of the musical tune.

Furthermore, Yokoyama discloses a massager. Yokoyama also discloses a first electromechanical ambulation mechanism (fig. 10 or 11, vibrator 3) having a first foot (fig. 11, vibrator case part 15 protruding from the upper surface of the main body 1) extending through a first opening in the housing for making contact with an external

surface on which the handheld audio device is placed (the vibrator case part 15 is protruding and therefore is capable of having contact with an external).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Shibata and Noro in view of Yokoyama.

The motivation/suggestion for doing so would have been to support the housing and the electromechanical ambulation mechanism on the external surface.

Regarding claim 15, Shibata, Noro, and Yokoyama disclose the handheld audio device according to claim 14 as described above. Shibata also discloses wherein: said audio system comprises a loudspeaker (receiver 50), and a second drive circuit coupled to the loudspeaker (signal processor 60 coupled to receiver 50).

Regarding claim 16, Shibata, Noro, and Yokoyama disclose the handheld audio device according to claim 14 as described above. Noro also discloses wherein: the controller is programmed to digitally process digital audio to obtain processed audio and drive the ambulation system according to the processed audio (paragraphs 0047-0050).

Regarding claim 17, Shibata, Noro, and Yokoyama teach the handheld audio device according to claim 16 as described above. Noro further teaches wherein: the controller is programmed to process digital music with a beat detection algorithm (detection circuit 18), in order to detect one or more beats (i.e., rhythm sounds), and operate the ambulation system so as to change a direction of movement of the handheld audio device in response to the one or more beats (i.e., generating vibration in synchronization with the rhythm sounds). See paragraphs 0028-0029.

Regarding claim 18, Shibata, Noro, and Yokoyama disclose the handheld audio device according to claim 14 as described above. Shibata also discloses wherein: said audio system comprises a microphone (microphone 40); and wherein the controller is programmed by the control program to: process input audio signals (signal processor 60) received from the microphone (microphone 40) to obtain processed audio; and operate the electromechanical ambulation mechanism (vibrator 90) according to the processed audio (paragraphs 0024 & 0030).

Regarding claim 19, Shibata, Noro, and Yokoyama disclose the handheld audio device according to claim 18 as described above. Noro also discloses wherein: the controller is programmed to process input audio signals received from the microphone with a beat detection algorithm to detect one or more beats and operate the electromechanical ambulation mechanism to change a movement of the handheld audio device in response to the one or more beats (paragraphs 0028-0030).

Regarding claim 22, Shibata, Noro, and Yokoyama disclose the handheld audio device according to claim 16 as described above. Since Yokoyama teaches or suggests a pair of vibrators 3 are extending through an opening in the housing for making contact with the external surface on which the handheld device is placed (see fig. 11); hence, it reads on claim limitation. Even though, the cited references do not specifically teach the first drive circuit is also coupled to the second electromechanical ambulation mechanism. However, it is obvious and/or well known in the art to couple any electromechanical ambulation mechanism to the drive circuit to have a control of the mechanism.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798. The examiner can normally be reached on Monday - Thursday from 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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